

**ABSTRACT**

An improved process for preparing an aqueous dispersion of plastics additive polymer particles using emulsion polymerization of one or more ethylenically unsaturated monomers in an aqueous medium in the presence of a free radical redox initiator system is described. The free radical redox initiator system uses an oxidizing agent, a reducing agent, and a combination of metal ion species. The plastics additive polymer particles are useful as processing aids and impact modifiers in PVC articles.